STATE OF MARYLAND
DHMH

Maryland Department of Health and Mental Hygiene
201 W. Preston Street • Baltimore, Maryland 21201
Martin O'Malley, Governor – Anthony G. Brown, Lt. Governor – Joshua M. Sharfstein, M.D., Secretary

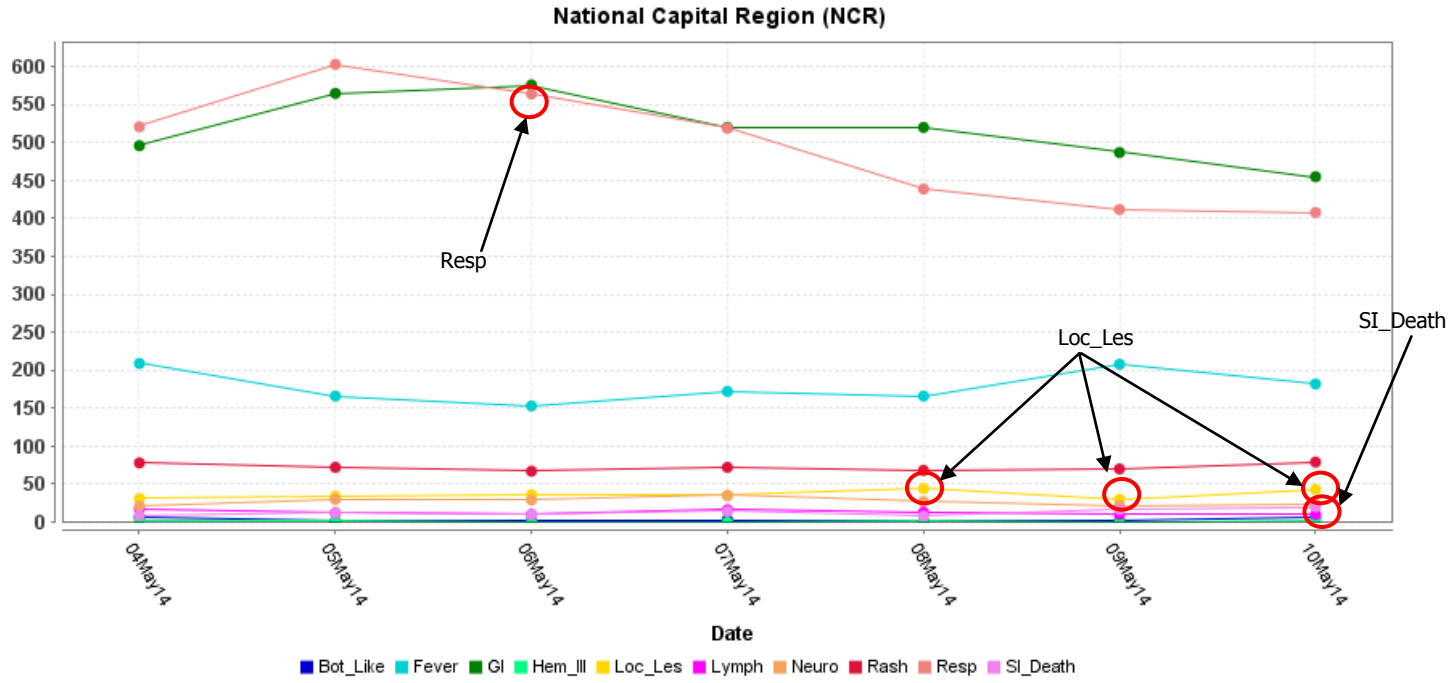
May 16, 2014

Public Health & Emergency Preparedness Bulletin: # 2014:19
Reporting for the week ending 05/10/14 (MMWR Week #19)

CURRENT HOMELAND SECURITY THREAT LEVELS

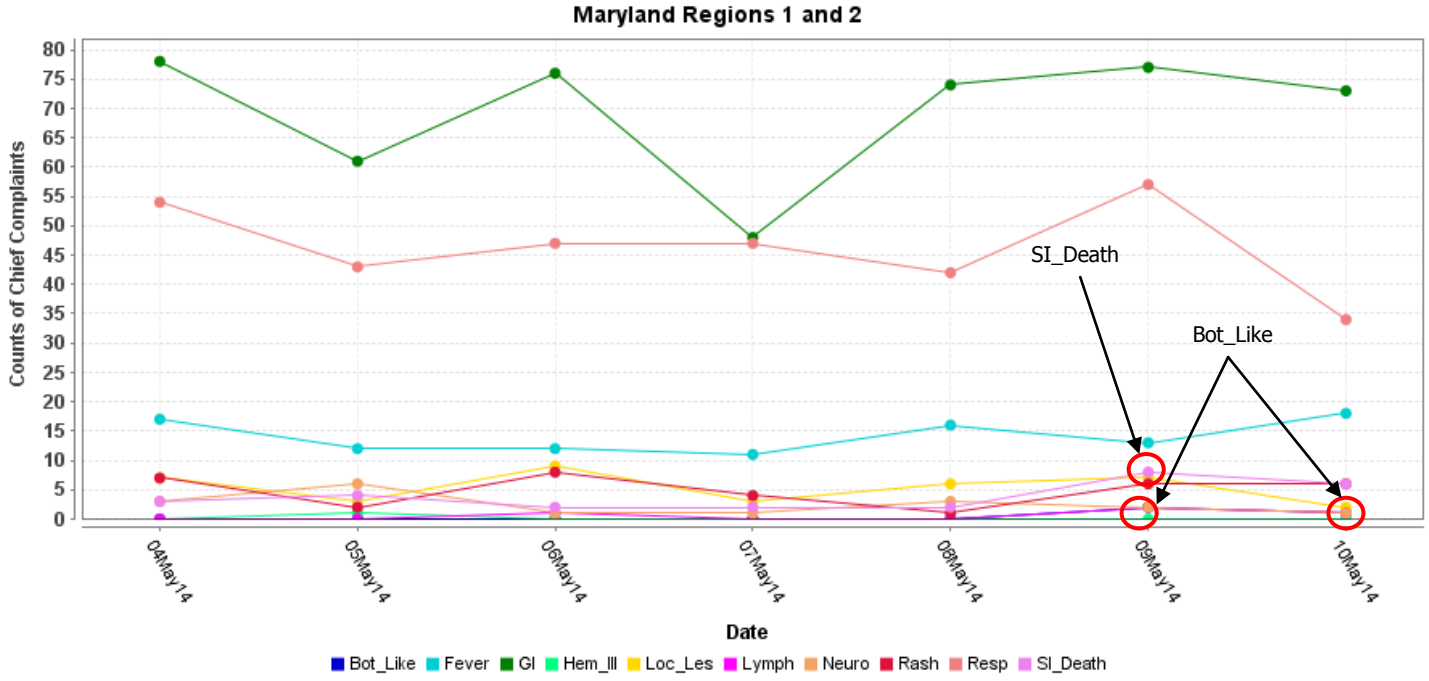
National: **No Active Alerts**
Maryland: **Level Four (MEMA status)**

SYNDROMIC SURVEILLANCE REPORTS
ESSENCE (Electronic Surveillance System for the Early Notification of Community-based Epidemics):
Graphical representation is provided for all syndromes, excluding the "Other" category, all age groups, and red alerts are circled. Red alerts are generated when observed count for a syndrome exceeds the 99% confidence interval. Note: ESSENCE – ANCR uses syndrome categories consistent with CDC definitions.
Overall, no suspicious patterns of illness were identified. Track backs to the health care facilities yielded no suspicious patterns of illness.

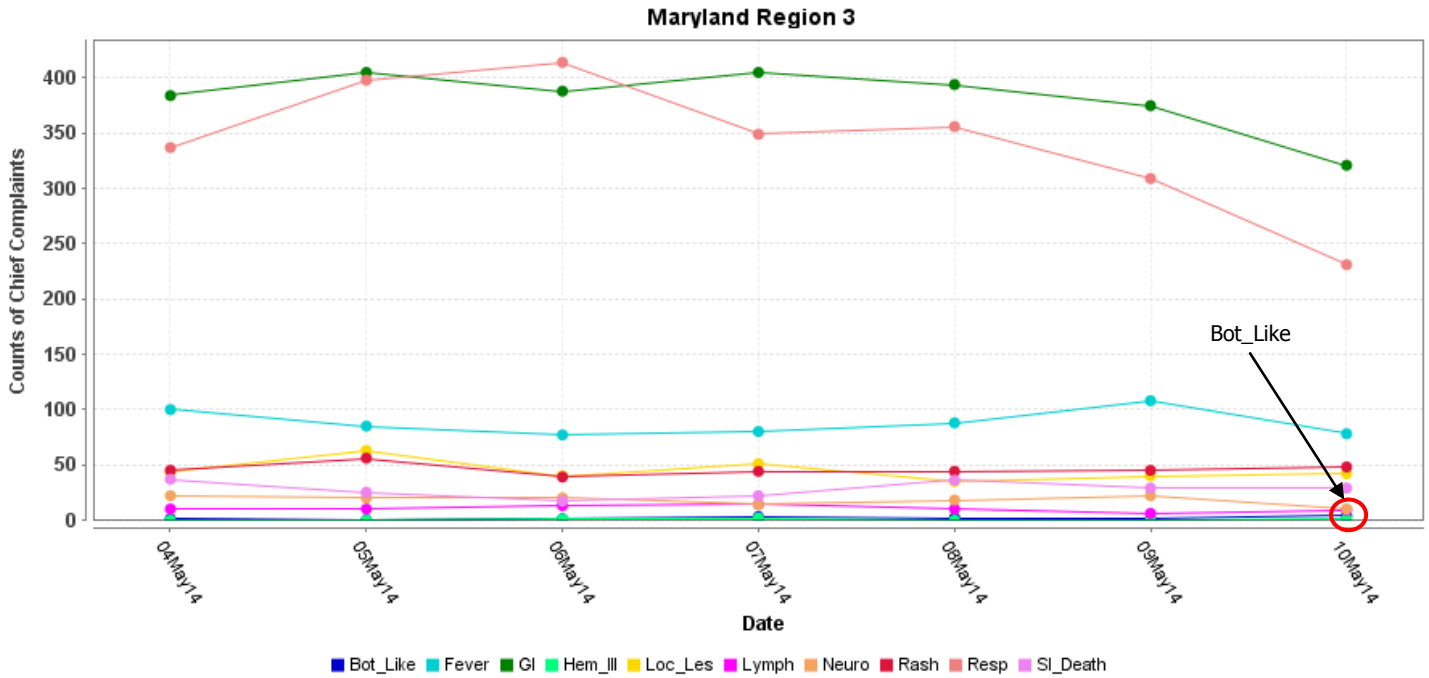


*Includes EDs in all jurisdictions in the NCR (MD, VA, and DC) reporting to ESSENCE

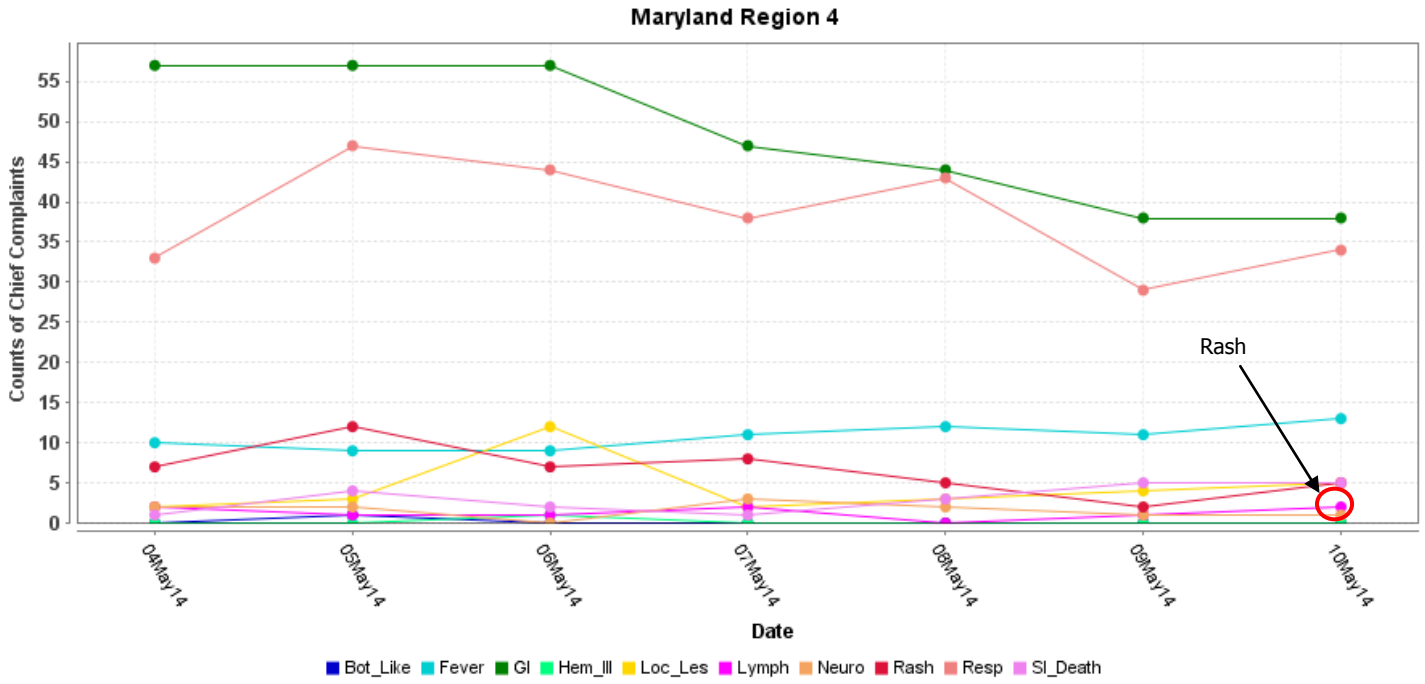
MARYLAND ESSENCE:



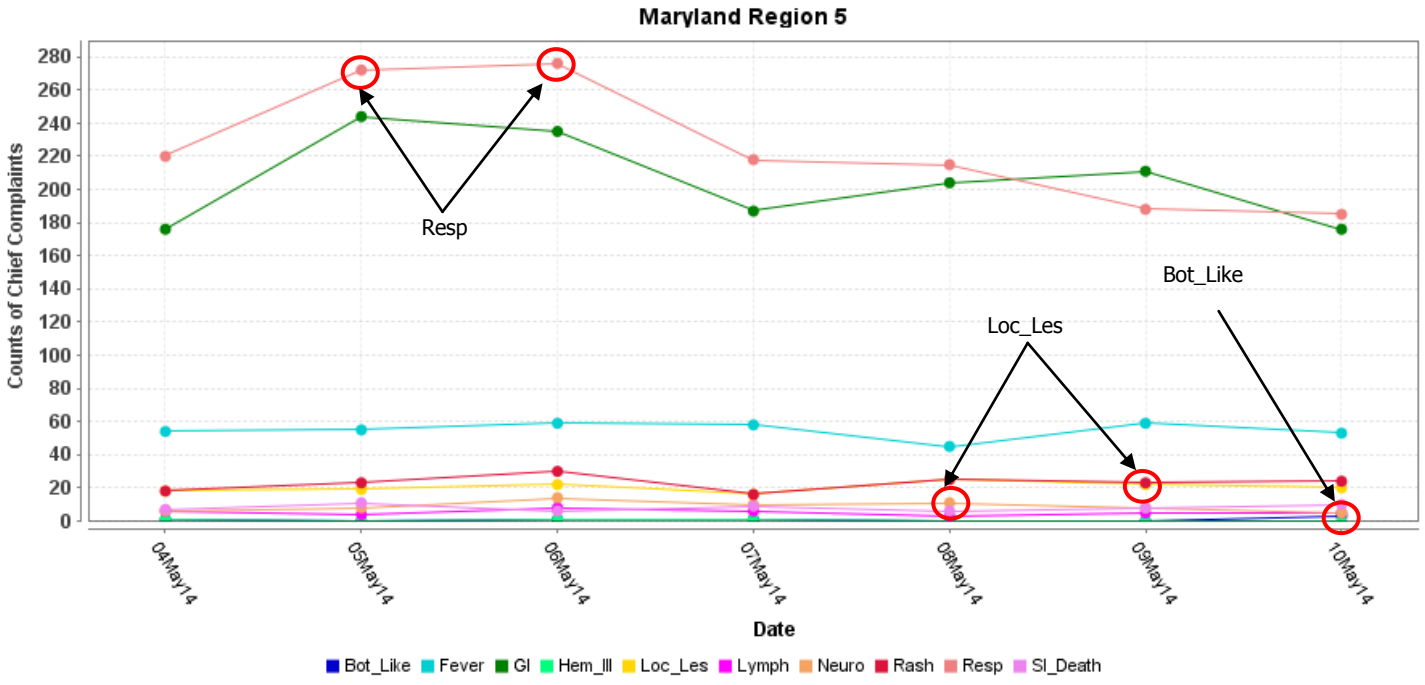
* Region 1 and 2 includes EDs in Allegany, Frederick, Garrett, and Washington counties reporting to ESSENCE



* Region 3 includes EDs in Anne Arundel, Baltimore City, Baltimore, Carroll, Harford, and Howard counties reporting to ESSENCE



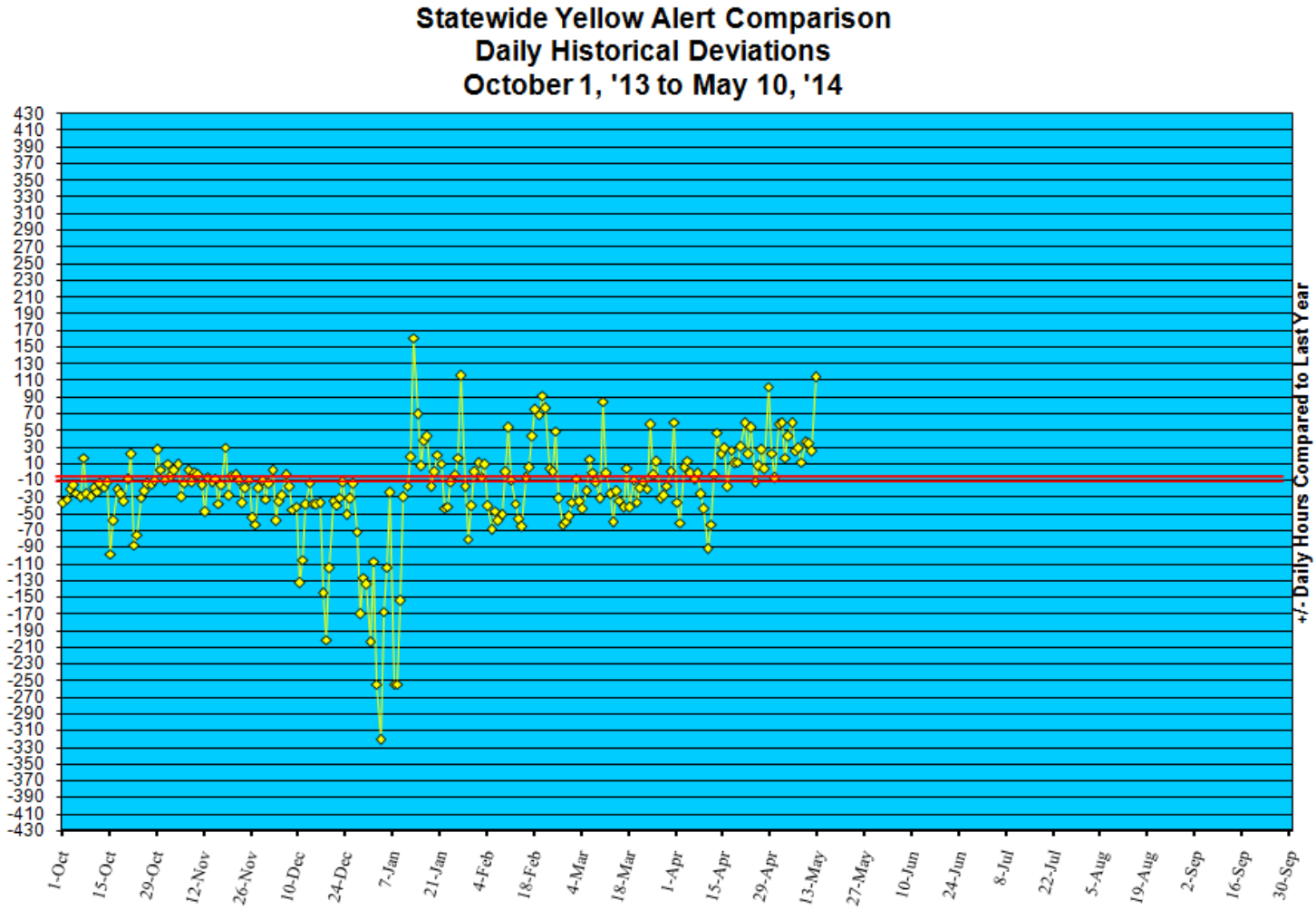
* Region 4 includes EDs in Cecil, Dorchester, Kent, Somerset, Talbot, Wicomico, and Worcester counties reporting to ESSENCE



* Region 5 includes EDs in Calvert, Charles, Montgomery, Prince George's, and St. Mary's counties reporting to ESSENCE

REVIEW OF EMERGENCY DEPARTMENT UTILIZATION

YELLOW ALERT TIMES (ED DIVERSION): The reporting period begins 10/01/13.



REVIEW OF MORTALITY REPORTS

Office of the Chief Medical Examiner: OCME reports no suspicious deaths related to an emerging public health threat for the week.

MARYLAND TOXIDROMIC SURVEILLANCE

Poison Control Surveillance Monthly Update: Investigations of the outliers and alerts observed by the Maryland Poison Center and National Capital Poison Center in April 2014 did not identify any cases of possible public health threats.

REVIEW OF MARYLAND DISEASE SURVEILLANCE FINDINGS

COMMUNICABLE DISEASE SURVEILLANCE CASE REPORTS (confirmed, probable and suspect):

Meningitis:	**Aseptic**	**Meningococcal**
New cases (May 4 - May 10, 2014):	11	0
Prior week (April 27 - May 3, 2014):	7	0
Week#19, 2013 (May 5 - May 11, 2014):	3	0

4 outbreaks were reported to DHMH during MMWR Week 19 (May 4 - May 10, 2014)

2 Gastroenteritis Outbreaks
1 outbreak of GASTROENTERITIS associated with a Conference Room
1 outbreak of GASTROENTERITIS in an Assisted Living Facility

1 Rash Illness Outbreak
1 outbreak of FIFTH DISEASE associated with a School

1 Other Outbreak
1 outbreak of PHARYNGITIS associated with a School

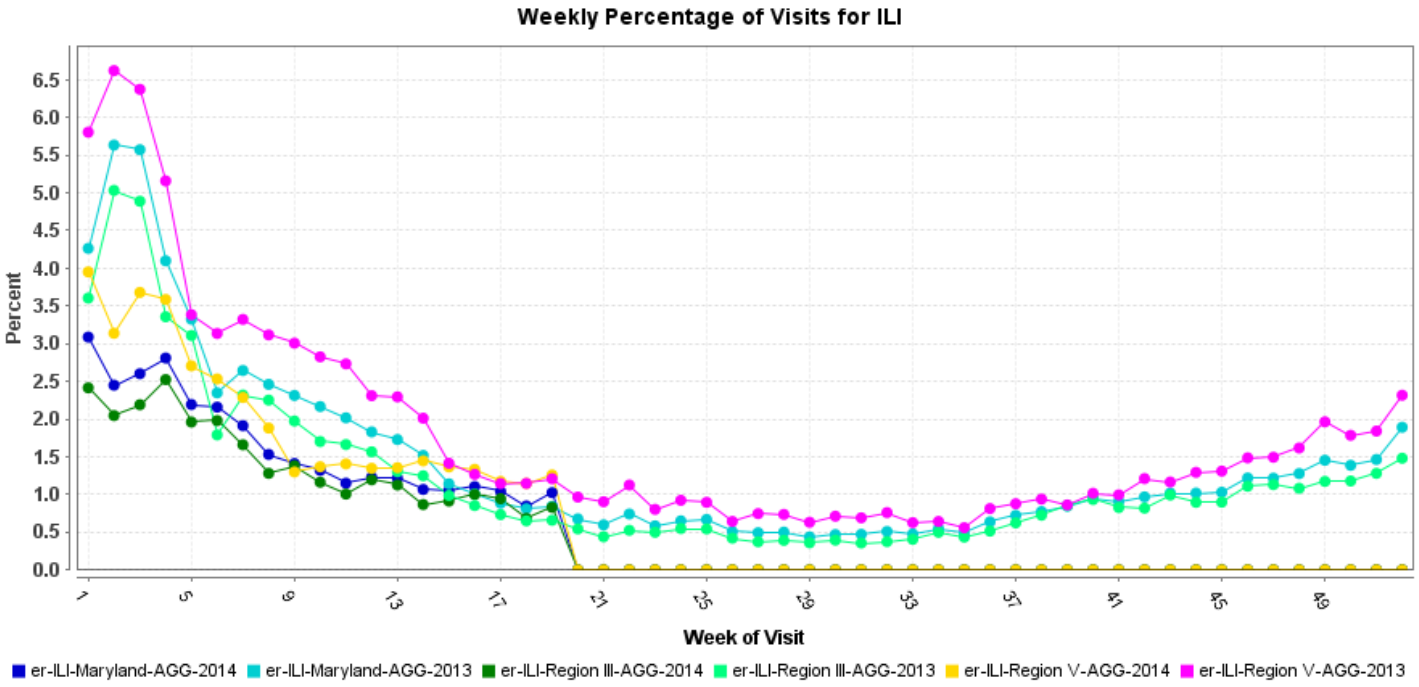
MARYLAND SEASONAL FLU STATUS

Seasonal Influenza reporting occurs October through May. Seasonal influenza activity for Week 19 was: Sporadic with Minimal Intensity.

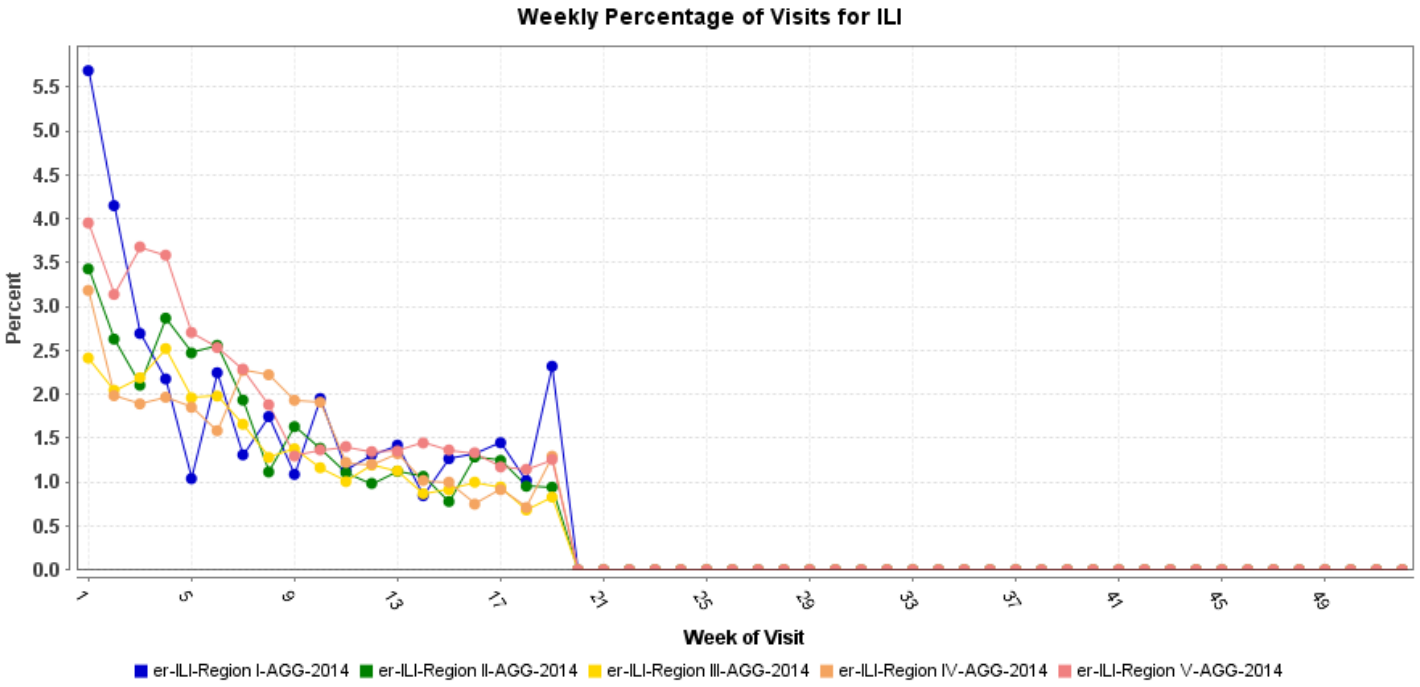
SYNDROMIC SURVEILLANCE FOR INFLUENZA-LIKE ILLNESS

Graphs show the percentage of total weekly Emergency Department patient chief complaints that have one or more ICD9 codes representing provider diagnoses of influenza-like illness. These graphs do not represent confirmed influenza.

Graphs show proportion of total weekly cases seen in a particular syndrome/subsyndrome over the total number of cases seen. Weeks run Sunday through Saturday and the last week shown may be artificially high or low depending on how much data is available for the week.



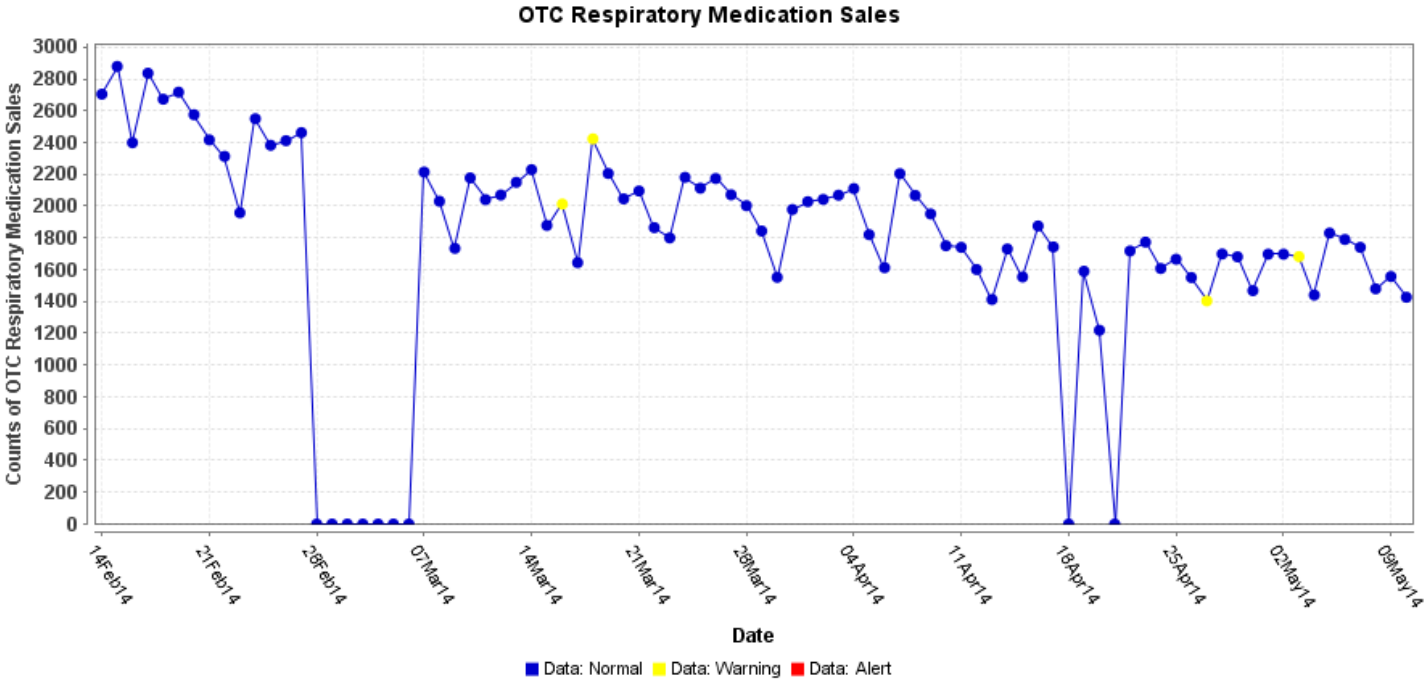
* Includes 2013 and 2014 Maryland ED visits for ILI in Metro Baltimore (Region 3), Maryland NCR (Region 5), and Maryland Total



*Includes 2014 Maryland ED visits for ILI in Region 1, 2, 3, 4, and 5

OVER-THE-COUNTER (OTC) SALES FOR RESPIRATORY MEDICATIONS:

Graph shows the daily number of over-the-counter respiratory medication sales in Maryland at a large pharmacy chain.



PANDEMIC INFLUENZA UPDATE / AVIAN INFLUENZA-RELATED REPORTS

WHO update: The current WHO phase of pandemic alert for avian influenza is ALERT. Currently, the avian influenza H5N1 virus continues to circulate in poultry in some countries, especially in Asia and northeast Africa. This virus continues to cause sporadic human infections with some instances of limited human-to-human transmission among very close contacts. There has been no sustained human-to-human or community-level transmission identified thus far.

Influenza A (H7N9) is one of a subgroup of influenza viruses that normally circulate among birds. Until recently, this virus had not been seen in people. However, human infections have now been detected. As yet, there is limited information about the scope of the disease the virus causes and about the source of exposure. The disease is of concern because most patients have been severely ill. There is no indication thus far that it can be transmitted between people, but both animal-to-human and human-to-human routes of transmission are being actively investigated.

Alert phase: This is the phase when influenza caused by a new subtype has been identified in humans. Increased vigilance and careful risk assessment, at local, national and global levels, are characteristic of this phase. If the risk assessments indicate that the new virus is not developing into a pandemic strain, a de-escalation of activities towards those in the interpandemic phase may occur. As of January 24, 2014, the WHO-confirmed global total of human cases of H5N1 avian influenza virus infection stands at 650, of which 386 have been fatal. Thus, the case fatality rate for human H5N1 is approximately 59%.

AVIAN INFLUENZA (H5N6): In recent years Sichuan province has intensified and improved the sensitivity of its surveillance addressing influenza-like illness and unexplained cases of pneumonia in human patients. Recently, a throat swab sampled from a case of severe pneumonia in Nanchong city, was found positive for nucleic acid of avian influenza virus H5N6. This was confirmed by the China Disease Prevention and Control Center. The patient, a 49-year-old male, clinically diagnosed by a joint group of experts of the provincial and municipal rescue team as suffering acute severe pneumonia, died. He had a history of exposure to sick and dead poultry in Nanbu County, Nanchong City. All his close contacts did not show abnormal health signs. Experts consider this case as a human infection with avian influenza virus, They consider the spread risk as low. To prevent respiratory diseases, experts advise the public to provide for satisfactory indoor ventilation, reasonable rest, reducing stays in crowded air spaces, routinely wash hands, cover mouth and nose when coughing and sneezing, cater for general personal hygiene, and refrain from coming in contact with dead poultry or consuming produce from such animals. It is recommended to buy poultry meat from freshly slaughtered healthy animals. If frozen poultry is purchased, one should look for the accompanying veterinary certificates of origin. People having any symptoms of influenza should seek immediate medical attention.

NATIONAL DISEASE REPORTS*

There are no national disease reports for MMWR Week 19

INTERNATIONAL DISEASE REPORTS*

EBOLA VIRUS DISEASE (GUINEA): 10 May 2014, As of 1800 on 5 May 2014, the Ministry of Health (MOH) of Guinea has reported a cumulative total of 235 clinical cases of Ebola virus disease (EVD), including 157 deaths. There has been no change in the number of cases confirmed by ebolavirus PCR (127 cases) since the last update of 2 May 2014, but there have been 2 additional deaths: one among the confirmed cases and the other among the probable cases. This brings the number of deaths to 83. There have been no new probable or suspected cases. In addition, 55 cases (34 deaths) are classified as suspected cases. As of 7 May [2014], one patient remains in isolation in Conakry and one in Guekedou. The date of isolation of the most recent confirmed cases is 26 Apr [2014] in Conakry and 1 May [2014] in Guekedou. The geographical distribution of clinical cases of EVD since the beginning of the outbreak is as follows: Conakry (53 cases, including 24 deaths), Guekedou (149/107), Macenta (22/16), Kissidougou (6/5), Dabola (4/4), and Djingaraye (1/1). There have been no new cases of EVD in Kissidougou since 1 Apr [2014], Macenta since 9 Apr [2014], or Conakry since 22 Apr [2014]. In Djingaraye and Dabola, no new cases have been reported since the end of March 2014. The cumulative total of laboratory confirmed cases and deaths since the beginning of the outbreak is: Conakry (40 cases, including 20 deaths); Guekedou (72/51); Macenta (13/10); Kissidougou (1/1); and Dabola (1/1). The analysis of the epidemiological data during the last 3 weeks shows that the number of new cases is decreasing in Guekedou. The numbers of cases and contacts remain subject to change due to consolidation of case, contact and laboratory data, enhanced surveillance activities, and contact tracing activities. The recent introduction of ebolavirus serology to test PCR negative clinical cases is also likely to change the final number of laboratory confirmed cases. EVD prevention and control activities continue in Guekedou. These include: a suite of innovative community sensitization and social mobilization activities with community leaders, mining companies, banks, schools and universities, and local nongovernmental organizations; the dissemination of awareness messages through rural community radio and posters; the screening of films on EVD; and providing education about EVD door-to-door in affected villages or neighborhoods. As the incubation period for EVD can be up to 3 weeks, it is likely that the Guinean health authorities will report new cases in the coming weeks and additional suspected cases may also be identified in neighboring countries. (Viral Hemorrhagic Fevers are listed in Category A on the CDC List of Critical Biological Agents) *Non-suspect case

SALMONELLOSIS, SEROTYPE JAVA (AUSTRALIA): 06 May 2014, An outbreak of salmonellosis cases in children on the northern beaches is being blamed on bandicoot droppings. Northern Sydney Local Health District director of public health Dr. Michael Staff said cases of the potentially deadly bacterial infection were rare, but there had been an unexplained spike that began in February 2014. "So far in 2014, we've had 19 cases confirmed, and while some have been traced to play area sand, it appears that many children may have been infected by contact with bandicoot droppings," Dr. Staff said. The Northern Sydney Public Health Unit inspected the backyards of several patients and found that bandicoot droppings collected at a property tested positive for Salmonella enterica serotype Java. Dr. Staff said the bacteria could be transferred by touch. "Young children tend to put their fingers in their mouths a lot, and this could transfer the bacterium to them if they have touched a contaminated surface," Dr. Staff said. To prevent further spread of the illness, the Public Health Unit recommends that parents of young children clear animal droppings from areas where their children play, discourage children from putting their hands or toys in their mouth when playing outside, and make sure their children wash their hands after playing outside. Chicken wire mesh at least 50 cm high [with 2 cm mesh] and buried 15 cm below the surface would stop bandicoots from entering backyards. (Food Safety Threats are listed in Category B on the CDC List of Critical Biological Agents) *Non-suspect case

E. COLI EHEC (ENGLAND): 06 May 2014, The number of confirmed cases of E. coli infection following an outbreak after a lambing live event has risen. Public Health England says they now have 14 confirmed cases of the O157 infection in 12 children and 2 adults who had been to "lambing live" at Huntley's Country Stores in Samlesbury, near Preston. Last week, the health body said there were 11 cases in 9 children and 2 adults. All of the children

are under 10 years old. An investigation was launched following the outbreak at the popular venue. All contact between animals and the public at the premises has now ceased. It is believed the outbreak began before Easter. Anyone who visited the lambing event at Huntley's between 29 Mar and 24 Apr 2014 and who is unwell is advised to seek medical advice. (Food Safety Threats are listed in Category B on the CDC List of Critical Biological Agents) *Non-suspect case

CHOLERA (NIGERIA): 06 May 2014, At last 20 people have been feared killed, while 32 are currently hospitalized following a cholera outbreak in Barkin town of Barkin Ladi local government, Plateau State. A member of the community confided in Leadership that 20 people had so far lost their lives as a result of the outbreak. The council chairman, Emmanuel Loman, in a telephone interview in Jos, the state capital, however, said only 5 people had lost their lives to the outbreak of the disease, while 32 were hospitalized and were responding to treatment. He said the council had made drugs available for the treatment of those hospitalized and had also set aside a day to sensitise the people on the need to wash fruits very well before eating them and to live in a clean environment. Loman identified poor hygiene as one of the major causes of cholera and advised the people to keep their environment clean, wash fruits before eating, avoid staying in a congested environment, and report to the nearest hospital for appropriate action in cases of frequent stooling and vomiting in their area. (Water Safety Threats are listed in Category B on the CDC List of Critical Biological Agents) *Non-suspect case

SALMONELLOSIS, SEROTYPE ENTERITIDIS (SPAIN): 06 May 2014, Almost 200 people, mostly children 2 to 17 years, have suffered foodborne illness in an outbreak of salmonellosis in a college of San Bartolome de Tirajana (Gran Canaria), which has been forced to hospitalize 18 pupils in different centers. This outbreak of salmonellosis, the largest ever recorded in the archipelago, occurred at the South Sands School after one of the food handlers of this center of private education contaminated a pasta salad that was served as lunch with Salmonella enterica serotype Enteritidis. This was reported today, 5 May 2014, by the director general of Public Health of the Government of the Canary islands, Jose Diaz Flores. The analysis of his department did not attribute the outbreak of salmonellosis to the dish made with sauce and egg but to the deficient hygienic-sanitary practices of the food handler. Flores said that there are 199 persons ill due to this bacterium, 191 of them children, and 8 were workers at the school, of which 18 have been admitted with a fever, vomiting, diarrhea and abdominal pain, although they have improved and are expected to be discharged. Public Health does not believe that the outbreak will continue to increase because the incubation period of this disease is between 24-72 hours, and the 1st cases were detected Wednesday afternoon [30 Apr 2014]. From 30 Apr through 1 May 2014, there had been a continuous flow of ill people affected, mainly children, in the health centers of the south and from the island's capital. (Food Safety Threats are listed in Category B on the CDC List of Critical Biological Agents) *Non-suspect case

UNDIAGNOSED HEMORRHAGIC ILLNESS (PAKISTAN): 05 May 2014, The affected women reportedly experienced similar symptoms, which started from pain in the upper part of the body and eventually led to bleeding from the mouth and nose. All victims died within a few hours of showing these symptoms. Residents reported the deaths to health officials, who visited the area, the tribesman added. Bajaur Agency Political Agent Syed Abdul Jabbar Shah confirmed the deaths and said he had directed the agency surgeon and agricultural experts to visit the area and conduct a thorough investigation. Declaring an emergency at the Agency Headquarters Hospital, he asked the hospital administration to take special care of the women suspected to be suffering from the mysterious ailment. Agency Surgeon Dr. Zakir Husain, who has already visited the area, said an investigation was currently under way and experts have narrowed the cause of death to 2 possibilities. "There could either be some poison in the area or the deaths were caused by a virus," he said. Dr. Pervez Kamal said they have asked WHO and NIH to investigate the mysterious disease. He said they sent a team of doctors and agricultural experts to the area but have yet to ascertain what caused the women to fall so sick. He said they have established medical camps in the affected areas to provide urgent treatment if any more people are affected, adding WHO teams will visit the areas now and send samples to NIH to ascertain the cause of deaths. Interestingly, one of the doctors who visited the area, Dr. Alam Khan, told The Express Tribune on Friday [2 May 2014] that the victims who died were suffering from other diseases like diabetes and stroke among others. He said an isolation ward was set up at the Agency Headquarters Hospital Khar for patients showing the said symptoms but no one had been admitted as of Fri 2 May 2014. "It is a phobia," he said, and as far as they know the victims did not die of any mysterious disease but from other known ailments.

National and International Disease Reports are retrieved from http://www.promedmail.org/.

OTHER RESOURCES AND ARTICLES OF INTEREST

More information concerning Public Health and Emergency Preparedness can be found at the Office of Preparedness and Response website: http://preparedness.dhmh.maryland.gov/ or follow us on Facebook at www.facebook.com/MarylandOPR.

Maryland's Resident Influenza Tracking System: http://dhmh.maryland.gov/flusurvey

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NOTE: This weekly review is a compilation of data from various surveillance systems, interpreted with a focus on a potential BT event. It is not meant to be inclusive of all epidemiology data available, nor is it meant to imply that every activity reported is a definitive BT event. International reports of outbreaks due to organisms on the CDC Critical Biological Agent list will also be reported. While not "secure", please handle this information in a professional manner. Please feel free to distribute within your organization, as you feel appropriate, to other professional staff involved in emergency preparedness and infection control.

For questions about the content of this review or if you have received this and do not wish to receive these weekly notices, please e-mail us. If you have information that is pertinent to this notification process, please send it to us to be included in the routine report.

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Table: Text-based Syndrome Case Definitions and Associated Category A Conditions

Syndrome	Definition	Category A Condition
Botulism-like	ACUTE condition that may represent exposure to botulinum toxin ACUTE paralytic conditions consistent with botulism: cranial nerve VI (lateral rectus) palsy, ptosis, dilated pupils, decreased gag reflex, media rectus palsy. ACUTE descending motor paralysis (including muscles of respiration) ACUTE symptoms consistent with botulism: diplopia, dry mouth, dysphagia, difficulty focusing to a near point.	Botulism
Hemorrhagic Illness	SPECIFIC diagnosis of any virus that causes viral hemorrhagic fever (VHF): yellow fever, dengue, Rift Valley fever, Crimean-Congo HF, Kyasanur Forest disease, Omsk HF, Hantaan, Junin, Machupo, Lassa, Marburg, Ebola ACUTE condition with multiple organ involvement that may be consistent with exposure to any virus that causes VHF ACUTE blood abnormalities consistent with VHF: leukopenia, neutropenia, thrombocytopenia, decreased clotting factors, albuminuria	VHF
Lymphadenitis	ACUTE regional lymph node swelling and/ or infection (painful bubo- particularly in groin, axilla or neck)	Plague (Bubonic)
Localized Cutaneous Lesion	SPECIFIC diagnosis of localized cutaneous lesion/ ulcer consistent with cutaneous anthrax or tularemia ACUTE localized edema and/ or cutaneous lesion/ vesicle, ulcer, eschar that may be consistent with cutaneous anthrax or tularemia INCLUDES insect bites EXCLUDES any lesion disseminated over the body or generalized rash EXCLUDES diabetic ulcer and ulcer associated with peripheral vascular disease	Anthrax (cutaneous) Tularemia
Gastrointestinal	ACUTE infection of the upper and/ or lower gastrointestinal (GI) tract SPECIFIC diagnosis of acute GI distress such as Salmonella gastroenteritis ACUTE non-specific symptoms of GI distress such as nausea, vomiting, or diarrhea EXCLUDES any chronic conditions such as inflammatory bowel syndrome	Anthrax (gastrointestinal)

Syndrome Definitions for Diseases Associated with Critical Bioterrorism-associated Agents
(continued from previous page)

Syndrome	Definition	Category A Condition
Respiratory	ACUTE infection of the upper and/ or lower respiratory tract (from the oropharynx to the lungs, includes otitis media) SPECIFIC diagnosis of acute respiratory tract infection (RTI) such as pneumonia due to parainfluenza virus ACUTE non-specific diagnosis of RTI such as sinusitis, pharyngitis, laryngitis ACUTE non-specific symptoms of RTI such as cough, stridor, shortness of breath, throat pain EXCLUDES chronic conditions such as chronic bronchitis, asthma without acute exacerbation, chronic sinusitis, allergic conditions (Note: INCLUDE *acute exacerbation* of chronic illnesses.)	Anthrax (inhalational) Tularemia Plague (pneumonic)
Neurological	ACUTE neurological infection of the central nervous system (CNS) SPECIFIC diagnosis of acute CNS infection such as pneumococcal meningitis, viral encephalitis ACUTE non-specific diagnosis of CNS infection such as meningitis not otherwise specified (NOS), encephalitis NOS, encephalopathy NOS ACUTE non-specific symptoms of CNS infection such as meningismus, delerium EXCLUDES any chronic, hereditary or degenerative conditions of the CNS such as obstructive hydrocephalus, Parkinson's, Alzheimer's	Not applicable
Rash	ACUTE condition that may present as consistent with smallpox (macules, papules, vesicles predominantly of face/arms/legs) SPECIFIC diagnosis of acute rash such as chicken pox in person > XX years of age (base age cut-off on data interpretation) or smallpox ACUTE non-specific diagnosis of rash compatible with infectious disease, such as viral exanthem EXCLUDES allergic or inflammatory skin conditions such as contact or seborrheaic dermatitis, rosacea EXCLUDES rash NOS, rash due to poison ivy, sunburn, and eczema	Smallpox
Specific Infection	ACUTE infection of known cause not covered in other syndrome groups, usually has more generalized symptoms (i.e., not just respiratory or gastrointestinal) INCLUDES septicemia from known bacteria INCLUDES other febrile illnesses such as scarlet fever	Not applicable

Syndrome Definitions for Diseases Associated with Critical Bioterrorism-associated Agents (continued from previous page)

Syndrome	Definition	Category A Condition
Fever	ACUTE potentially febrile illness of origin not specified INCLUDES fever and septicemia not otherwise specified INCLUDES unspecified viral illness even though unknown if fever is present EXCLUDE entry in this syndrome category if more specific diagnostic code is present allowing same patient visit to be categorized as respiratory, neurological or gastrointestinal illness syndrome	Not applicable
Severe Illness or Death potentially due to infectious disease	ACUTE onset of shock or coma from potentially infectious causes EXCLUDES shock from trauma INCLUDES SUDDEN death, death in emergency room, intrauterine deaths, fetal death, spontaneous abortion, and still births EXCLUDES induced fetal abortions, deaths of unknown cause, and unattended deaths	Not applicable